

Size: 17,232 acres
Mission: Manufactured TNT and DNT during World War II
HRS Score: 30.26; placed on NPL in February 1990
IAG Status: IAG signed in 1990; amended in August 1991
Contaminants: TNT, DNT, lead, asbestos, PCBs, PAHs, and low-level radioactive material
Media Affected: Groundwater and soil
Funding to Date: \$163.3 million
Estimated Cost to Completion (Completion Year): \$77.2 million (FY2004)
Final Remedy in Place or Response Complete Date for All Sites: FY2004



St. Charles County, Missouri

Restoration Background

From 1941 to 1944, the Weldon Spring Ordnance Works produced explosives for the Armed Services. The Army currently occupies the 1,655-acre Weldon Spring Training Area. The majority of the remaining property is owned by the state and is maintained as a wildlife area and an agricultural research facility of the University of Missouri.

Sites at the Weldon Spring Ordnance Works include lagoons, landfills, burning grounds and trinitrotoluene (TNT) and dinitrotoluene (DNT) production lines. Ongoing environmental studies, beginning in FY77, have revealed contamination of groundwater and soil. Initial assessments indicated the presence of explosives, lead, asbestos, pentachlorophenol (PCP), and polyaromatic hydrocarbons (PAHs). Areas containing radioactive material also were identified and are being addressed and remediated by the U.S. Department of Energy (DOE), with the cost of remediation shared by DoD and DOE.

Cleanup activities are grouped in operable units (OUs) including OUs for soil/pipeline (OU1), groundwater (OU2), building demolition and debris removal (OU3), and payments to the DOE for DoD liability (OU4). The OU2 Remedial Investigation (RI) began in FY91.

The U.S. Army Corps of Engineers (USACE) conducted several studies that relate to remediation efforts at the site: a biodegradation research study with the University of Idaho (FY92); a historical survey of activities, with the University of Cincinnati (FY94); and a study, with Texas A&M University, of genetic effects on organisms. USACE also established two community focus groups that included representatives of environmental groups and members of the community. The goal of the groups was to obtain objective, unbiased viewpoints on cleanup decisions.

In FY94, USACE began predesign studies and initiated the Remedial Design (RD) for OU1. The predesign studies and RD were completed in FY95. USACE also worked with DOE to prepare final joint RI and Feasibility Study (FS) work plans for OU2 and to complete two rounds of quarterly groundwater monitoring.

During FY96, USACE completed the RD and the Record of Decision (ROD) for OU1. The draft RI for OU2 was submitted to the regulatory agencies for review. The RI report was finalized in July 1997. Groundwater monitoring is ongoing at OU2.

A Restoration Advisory Board (RAB) meets periodically to discuss cleanup issues. RAB members include representatives of the community, the state regulatory agency, EPA, and other government entities, including the Missouri Department of Conservation (MDOC) and DOE.

FY98 Restoration Progress

The draft Proposed Plan for OU2 was submitted as a joint effort with DOE. However, comments from EPA and the Missouri Department of Natural Resources delayed finalization of the Proposed Plan until FY99. The OU1 Remedial Action (RA) work plans for soil and pipeline incineration were completed. The incinerator was erected, trial burns were successfully completed, and normal incineration of the contaminated soil and pipelines began. Significant partnering was conducted with regulators regarding initial operation of the incinerator. Three regular RAB meetings and four special RAB meetings were held regarding incinerator operation.

USACE, Kansas City District, has been concerned that the original concrete structures at the facility pose a risk to the local population.

Although the perimeter of the facility is fenced, unauthorized use of the facility has resulted in at least two deaths and numerous injuries. To address this problem USACE began the demolition of these structures. RD and demolition of one such structure, Water Treatment Plant No. 2, was completed in FY98.

Plan of Action

- Complete remaining OU1 RA activities in FY99
- Complete ROD for OU2 in FY99
- Pursue OU2 activities separate from DOE after signature of the ROD in FY99
- Coordinate details of long-term monitoring (LTM) with regulators and initiate LTM in FY00
- Complete RD for demolitions and actual demolition of Power Plant No. 2 in FY99
- Complete the RD for the demolition of Power Plant No.1 in FY00
- Coordinate and plan remaining Potentially Responsible Party payments to DOE in FY00

FY99 FUNDING BY PHASE AND RELATIVE RISK

